non-radio facilities. Television coverage of events by fiber optics is, by necessity, restricted to those situations that are known far enough in advance or where facilities are already in place. Existing circuits would be available for news and special events only in the most fortuitous circumstances where a fiber optic cable with idle capacity already exists at the venue, or where the predictability of demand for coverage has justified the installation of permanent circuits.

The economics of support circuit provisioning are also important. Precluded from the use of radio based equipment operated by the broadcaster, the necessity to use facilities rented from a telecommunications company could be sufficiently costly that televising an event might not be economically feasible, since many remote pickups are accomplished with microwave equipment owned by the television station and set up and operated by the station's personnel already on site for accomplishing other aspects of the telecast. Telecommunications companies not only charge for the rental of the transmission capacity, but also recover the cost of construction. Where the cost of construction must be recovered from the onetime use of a facility, the charges involved can be higher than if a different technology is used. Some common carrier tariffs for facilities have actually made short haul transmission by satellite more affordable. Also, more and more owners of buildings are demanding a payment for the physical penetration of their properties with the fiber cable and for the running of conduit through the building premises. Similarly,

for more permanent facilities, the use of fiber to replace existing station-owned STL microwave could result in initial construction charges and recurring operating costs with payments to the telecommunications company and potentially to property owners as well.

The use of fiber for ATV (or NTSC) broadcast auxiliary may not be viable in many circumstances. While fiber optic facilities may be the medium of choice in some situations, it is not yet sufficiently available or economical to provide a viable alternative for displacing all use of spectrum in support of ATV broadcast auxiliary operations.

Appendix D

Attendance (Alpha by Name)

1

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (Alpha by Name)

Affiliation Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 Name Aileen Amarandos Latham & Watkins х х Harvey Arnold North Carolina Public TV **X X X X** Paul Beeman Viacom Networks Krishma Bhatnagar COMSAT Martin Billips NPR Christina Black George Washington University William M. Borman Motorola x x x х х Capital Cities/ABC Kenneth Brown Karen Brown GAO/INTEC Frank Bugg PBS William Byrnes Haley, Bader & Potts Karen Christansen NPR NAB Lynn Claudy х х Jennifer Clayborne GAO David Cohen NTIA Jules Cohen Jules Cohen & Associates/MST Ed Cohen BAN Ted Coltman Corp. for Public Broadcasting х х **x** x x x x $x \times x \times x$ X X X Ben Crutchfield ATTC X Aldo G. Cugnini Philips Labs х Kathy Dale Televisa X Pat Daley Bellcore Allen Davidson Motorola **Hector Davis** FCC Laboratory **Gregory DePriest** MST Robert DeSantis ATTC **Bob Denny** Jules Cohen & Associates/MST * * * * * * * * * * Joe Donahue Thompson C.E. Linda Dubroof FCC Ken Dunmore Economists Inc. X A. James Ebel **Network Affiliats** x x **Bob Eckert** FCC Chris Ehrenbard HBO XXX James G. Ennis Fletcher, Heald & Hildreth

х х

Name

Krish Johnalagadda

2

Affiliation

David Sarnoff Research Center

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (Alpha by Name)

Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

Peter fannon ATTC Lex Felker Wiley, Rein & Fielding Kevin Fisher Smith & Powstenko $x \times x$ Barry Fleishman Anderson, Baker, Kill & Olick Bruce Franca FCC Tom Friel EIA/CEG Joe Gianguinto Group W Jim Gibson David Sarnoff Research Center W.E. Glenn NYIT Ronald J. Gnidziejko NBC х Gordon Godfrey XXX Anne Goodwin Fletcher, Heald & Hildreth Rick G. Gould Telecom Systems David Gumo HDTV Data Corp. David Hack CRS/SPR Library of Congress Ann Hagemann **HDTV** International David L. Hanna GTE Telops X George Hanover EIA William Hassinger FCC MMB **Hatfield Associates** Dale Hatfield x x x x x Howard Head A.D. Ring & Associates John G.N. Henderson David Sarnoff Research Center Rich Hindman House Subcommittee on Telecom. Judson Hoffman Panasonic Technologies Randy Hoffner NBC Robert Hopkins ATSC John Huffman **HDTV Washington Resources** Richard Iredale Del Ray Group Chuck Jackson Don Jansky Jansky Barmat Telecom, Inc./CBS x frank Jazzo Fletcher, Heald & Hildreth Mark W. Johnson Wayne Johnson Philips Labs X

Name

William F. Pohts

Consulting Engineer

Affiliation

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (Alpha by Name)

Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

NAB Ralph Justus Tom Keller NAB Dick Klensch David Sarnoff Research Center **x x x x x x x x x x x Bud Klueck** Fletcher, Heald & Hildreth X X Benn Kobb Federal Communications Tech News X X General Instrument Consultant Jeff Krauss $x \quad x \quad x \quad x$ Keiichi Kubota NHK James Kutzner PBS Ray Laforge FCC A-Vision Ken Laye.

The Frank Lang Ken Lager David Sarnoff Research Center Bernard J. Lechner Consultant CABSC John C. Lee Louis Libin NBC FCC PRB Marty Liebman Lawrence Lockwood TeleResources Zeni th Wayne C. Luplow Louise Lynch PBS FCC OET Paul Marrangoni Robert McFarlane Philips Labs James McNally FCC MMB/EPB Martin Meaney NBC Charles Mellone NT1A/DOC Saeed Mirzad Pacific Bell EIA/CEG Tom Mock Max Muterspaugh Thompson C.E. David Sarnoff Research Center Sheau Ng Celia Nogales Pacific Telesis Robert A. O'Connor Jansky Barmat Telecom, Inc./CBS Randy Oster U.S. WEST Advanced Technologie Stuart Overby Motorola Thomas Pfaff Medill News Service Larry Phillips Panasonic ATVL

Steve Wildman

Economists Inc.

Advanced Television Committee Planning Subcommittee MP-3 Spectrum Utilization Working Group Attendance (Alpha by Name)

Affiliation Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 Name Alison Purcell **HBO** Harley Radin Direct Broadcast Satellite Corp. Tom Ramstack FCC Week Publication Robert Rast General Instrument Ed Reinhardt **SBCA** Charles Rhodes ATTC Cinda Rishell CRS Jayne Roads **Hughes Aircraft** x x x Andrew Russell Corp. for Public Broadcasting Joe Russo ABC-TV Jouke Rypkema Zenith Burnett Sams NBC Tim Schnacke Fletcher Heald & Hildreth X Herb Schubarth Gannet t Ed Schultz **Bell Atlantic** Steve Selwyn FCC Wayne Shore COMSAT X Richard E. Shrum Department of State David Siddall FCC Rodney Small FCC х х Richard Solomon MIT Media Lab Altan Stalker Group W Tom Stanley FCC Alan Stillwell FCC Larrie Sutliff Bellcore Peter Tannenwald Arent, Fox, Kintner, Plotkin & Kahn x x Victor Tawil MST Eb Tingley EIA Tony Uyttendaele Capital Cities/ABC X Ted Wagner David Sarnoff Research Center Don Walker Motorola John Watson Group W Barbara Wellbery PBS х

Advanced Television Committee Planning Subcommittee MP-3 Spectrum Utilization Working Group Attendance (Alpha by Name)

	Name	Affiliation	Mtg:	2	3	4 5	6	7	8	9	10 1	11 1	2 13	5 14	15	16	17	18	19	20	21 2	22 2	23 2	4 2	5 20	6 27	28	29	30	31 3	32 3	3 34	35	36
	Dick Wiley	Wiley, Rein & Fielding	j	,																														
		ATTC				×				x			×	x	х				X	¥		,	ť	×	×	x	x	x	×	,	ı x		x	x
	David Workman	FCC				•				×			-						^	^			•											
	Kei Yamashita	Hitachi														x																		
	**********				• •										- •			• •		• •								• -				.	••	• •
	Totals: 140 Indiv. &	74 Entities Participating	i	20 24	31	30 2	8 30	31	31	26 2	25 2	25 20	33	3 25	22	21	21	17	14	15	21 1	17 2	22 1	8 2	3 2	0 28	3 17	18	20	16	25 1	9 23	. 17	26
	1st Meeting	12/16/87		27th	Hee	ting			12,	/8/8	9																							
4	2nd Meeting	1/12/88		28th	Meet	ting			1/	10/9	0																							
7	3rd Meeting	1/28/88		29th	Hee	ting			2/	7/90																								
		2/11/88		30th	Hee	ting			3/	13/9	0																							
		2/23/88		31st	Mee!	ting			5/	1/90)																							
		3/8/88		32nd	Meet	ting			6/	20/9	0																							
		3/22/88		33rd		_			9/	11/9	0																							
		4/5/88		34 th					10,	/30/	90																							
	_	4/19/88		35 th		-			12,	/5/9	0																							
	•	5/10/88		36th		-			1/	16/9	1																							
	11th Meeting	6/2/88		37th	Mee	ting			2/	12/9	1																							
	12th Meeting	6/27/88																																
	•	8/3/88																																
	14th Meeting	9/8/88																																
	15th Meeting	10/19/88		* Ch	n i a	man																												
	16th Meeting	11/22/88																																
	17th Meeting	12/21/88																																
	18th Meeting	1/11/89																																
	-	1/24/89																																
	20th Meeting	2/17/89																																
	21st Meeting	3/23/89																																
		5/22/89																																
	23rd Meeting	7/5/89																																
		9/7/89																																
		10/5/89																																
	26th Meeting	11/7/89																																

Appendix E
Attendance (by Affiliation)

Name

Richard Iredale

Del Ray Group

Affiliation

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (By Affiliation)

Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

Ken Lager A-Vision X Howard Head A.D. Ring & Associates $x \quad x \quad x$ Joe Russo ABC-TV Robert Hopkins ATSC Ben Crutchfield ATTC X Robert DeSantis ATTC Peter Fannon ATTC Charles Rhodes ATTC Ed Williams ATTC Barry Fleishman Anderson, Baker, Kill & Olick Peter Tannenwald Arent, Fox, Kintner, Plotkin & Kahn x x Ed Schultz Bell Atlantic Pat Daley Bellcore Bellcore Larrie Sutliff John C. Lee CABSC Mark W. Johnson CBS x Krishma Bhatnagar COMSAT COMSAT Wayne Shore Cinda Rishell CRS David Hack CRS/SPR Library of Congress Kenneth Brown Capital Cities/ABC Tony Uyttendaele Capital Cities/ABC **x x x x x** Bernard J. Lechner Consultant William F. Pohts Consulting Engineer Ted Coliman Corp. for Public Broadcasting Andrew Russell Corp. for Public Broadcasting \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} Jim Gibson David Sarnoff Research Center John G.N. Henderson David Sarnoff Research Center Krish Johnalagadda David Sarnoff Research Center Dick Klensch David Sarnoff Research Center Frank Lang David Sarnoff Research Center Sheau Ng David Sarnoff Research Center David Sarnoff Research Center Ted Wagner x x x

Name

David L. Hanna

GTE Telops

Affiliation

Advanced Television Committee Planning Subcommittee MP-3 Spectrum Utilization Working Group Attendance (By Affiliation)

Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

Richard E. Shrum Department of State X Harley Radin Direct Broadcast Satellite Corp. $x \times x \times x$ George Hanover EIA Eb Tingley EIA Tom Friel EIA/CEG Tom Mock EIA/CEG Х Ken Dunmore Economists Inc. Steve Wildman Economists Inc. Linda Dubroof FCC Bob Eckert FCC **X X X** Bruce Franca FCC х х Gordon Godfrey FCC x x x Ray Laforge FCC Steve Selwyn FCC $x \times x$ David Siddall FCC Rodney Small FCC Tom Stanley FCC X Alan Stillwell FCC X X X David Workman FCC Х Hector Davis FCC Laboratory William Hassinger FCC MMB James McNally FCC MMB/EPB Paul Marrangoni FCC OET Marty Liebman FCC PRB Tom Ramstack FCC Week Publication Benn Kobb Federal Communications Tech News Tim Schnacke Fletcher Heald & Hildreth James G. Ennis fletcher, Heald & Hildreth Anne Goodwin fletcher, Heald & Hildreth frank Jazzo fletcher, Heald & Hildreth x x x **Bud Klueck** fletcher, Heald & Hildreth X X Jennifer Clayborne GAO Karen Brown GAO/IMTEC

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (By Affiliation)

Name Affiliation Mtg: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

	Herb Schubarth	Gannett								x																											
	Robert Rast	General Instrument																																	X		
	Jeff Krauss	General Instrument Consultant																																х	хх	(x	i
	Christina Black	George Washington University		x	X	×		X	x	X	x																										
	Joe Gianguinto	Group W	x	x	×	×	×		X	x	X		x		x	x		x	x	x :	x	1	()	(x	X	х	x	x	x		x						
	Altan Stalker	Group W		×	X		x		X		x	X	x	x	x																						
	John Watson	Group W						x																				X				X	×	x		×	:
	Chris Ehrenbard	нво				×	×	X									x																				
	Alison Purcell	нво							X																												
	David Gump	HDTV Data Corp.																					K	X		X											
	Ann Hagemann	HDTV International													x												X										
<u>-</u> :	John Huffman	HDTV Washington Resources																						X	X	X											
	William Byrnes	Haley, Bader & Potts		-																			×								e						
	Dale Hatfield *	Hatfield Associates	X	X	X	×	×		×	×	X	X	X	×	x	X	x	x		X	х .	X	,	(x	X	X	X	X	X	X	X	X	X	X)	к х	t
	Kei Yamashita	Hitachi																x																			
	Rich Hindman	House Subcommittee on Telecom.					X																														
	Jayne Roads	Hughes Aircraft																				X .	x ;	4													
	Don Jansky	Jansky Barmat Telecom, Inc./CBS	X	×	Х	×	X	X	X	X	×	x	X	x	×		X	X	X	X		X.	X 3	K X	X		×	X	X		X	X	X	X	X X	(X	ı
	Robert A. O'Connor	Jansky Barmat Telecom, Inc./CBS			X	×	×	X	X	×			X	x	×	X	X	x	X	X	× .	×	x ;	K X	X	×	x	x	X	X	X	X	X	X .	x >	K X	i
	Jules Cohen	Jules Cohen & Associates/MST			X	X	x	X	X	X	X	X	X	X	X	X	X		X	X	×	×	X	X	X	×	х	X	X		X		X	х .	X	X	
	Bob Denny	Jules Cohen & Associates/MST	X	X	×	X	×	X	X	×	X	×																									
	Aileen Amarandos	Latham & Watkins							X	X																											
	Richard Solomon	MIT Media Lab	•				×																														
	Gregory DePriest	MST	X	×		X	×	×	X	X			X	×	x	×	X									X		X									
	Victor Tawil	MST								x	×	x	×	×	x	X	X	X	×	X	X		X I	K X	X	X		×		×	X	×		X		×	ı
	Thomas Pfaff	Medill News Service																						X													
	William M. Borman	Motorola	×	X		×	×	×	X			X	X	×		X		X	×				×							X	X						
	Allen Davidson	Motorola																					X					X									
	Stuart Overby	Motorola	x	×	X	X		X	X	X	X	X		X																							
	Don Walker	Motorola		X	X	X		X		X	×		X	×	X			×	X	х .	X	X	х :	ĸ	X	X	X		×				X				
	Lynn Claudy	NAB																×	X				,	к х	X	X	X		X		X	X	K		X		
	Ed Cohen	NAB																						×													
	Ralph Justus	NAB		X	×		X	x	X			x	X		×	X	x		×	X		X	X i	K X				x		X			×				
	Tom Keller	NAB				×	×					×																						1	×		

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (By Affiliation)

	Name	Affiliation	Mtg:	1	2	3	4	5	6 7	' 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
	Ronald Gnidziejko	NBC															x																					
	Randy Hoffner	NBC																								x	ж				x							
	Louis Libin	NBC		X	x	x	x	X .	хх	L X	×	X	X	x	x	х	X	x	х	x	x	x	x	x	X	×		х	x	х	х	X	×	x	×	x	1	х
	Martin Meaney	NBC		X	x	×	x	X .	хх	С	:	x	х	x	x	×		X						X														
	Burnett Sams	MBC																																	x	х	x ;	x
	Chuck Jackson	NERA																																x				
	Keiichi Kubota	NHK																											х	x								
	Martin Billips	NPR																																				
	Karen Christansen	NPR				X		×																														
	David Cohen	NTIA			x				×	×																												
ப	Charles Mellone	NTIA/DOC						:	x																													
2	W.E. Glenn	NYIT															x																					
	A. James Ebel	Network Affiliats				x	x																															
	Harvey Arnold	North Carolina Public TV																																	x	x	x)	х
	Frank Bugg	PBS					X	X :	х х		X	×				×																						
	James Kutzner	PBS																																X	×	x	х)	x
	Louise Lynch	PBS			X	X																																
	Barbara Wellbery	PBS					x																															
	Saeed Mirzad	Pacific Bell		×		×																																
	Celia Nogales	Pacific Telesis																	X																			
	Larry Phillips	Panasonic ATVL																																			х	ĸ
	Judson Hoffman	Panasonic Technologies				×	X	1	х х	×				X	x				X																			
	Aldo G. Cugnini	Philips Labs																											x									
	Wayne Johnson	Philips Labs													X																							
	Robert McFarlane	Philips Labs														×													x									
	Ed Reinhardt	SBCA					X					X		X	X																							
	Kevin Fisher	Smith & Powstenko																																		×	х х	(
	Lawrence Lockwood	TeleResources			X	x																																
	Rick G. Gould	Telecom Systems																		x																		
	Kathy Dale	Televisa				×																																
	Joe Donahue	Thompson C.E.																																x				
	Max Muterspaugh	Thompson C.E.															×	×	x	x	X	x	×	x	X	x	x	x	×		×	x	X	x	х.	х ;	СХ	:
	Randy Oster	U S WEST Advanced Technologi	i e												x	×										X	x		x	x			X				×	
	Paul Beeman	Viacom Networks								X	×	×	×																									

25th Meeting

10/5/89

5

Advanced Television Committee Planning Subcommittee WP-3 Spectrum Utilization Working Group Attendance (By Affiliation)

	Name	Affiliation	Mtg:	1	2	3	4	5	6	7	8	9	1	0 1	1 1	2 1	13	14	15	16	5 17	7 1	8 1	9 7	20 Z	1 7	22 2	23	24	25	26	27	28	29	30	31	32	33	3	4 3	5 3	56
	Lex felker	Wiley, Rein & Fielding																												×												
	Dick Wiley	Wiley, Rein & Fielding		×																																						
	Wayne C. Luplow	Zenith																x																								
	Jouke Rypkema	Zenith		X	X	X		X	X	X			×	x	X	×	(x	x	x	X	x	,	l .		,	K	x		X	X	×	x	×		×	x	x	x	×	ι
	Totals: 140 Indiv.	74 Entities Participating		20	24	31	30	28	30	31	31	1 26	5 2	5 2	5 2	0 3	3 :	25	22	21	21	11	7 1		15 2	,,	7 :	??	18	23	20	28	17	18	20	16	25	. 10	2 2			
	•																			-	_			•															_	•		
<u>ა</u>	1st Meeting	12/16/87		26	th:	Hee	ting	,			11,	/7/8	39																													
	2nd Meeting	1/12/88		27	th	Mee	ting	9			12,	/8/	89																												_	
	3rd Meeting	1/28/88		28	th	Hee	tin	9			1/	10/9	90																													
	4th Meeting	2/11/88		29	th	Mee	tin	9			2/3	7/9	0																													
	5th Meeting	2/23/88		30	th	Mee	tin	9			3/	13/	90																													
	6th Meeting	3/8/88		31	st	Hee	tin	9			5/	1/9	0																													
	7th Meeting	3/22/88		32	nd	Mee	tin	9			6/3	20/9	90																													
	8th Meeting	4/5/88		33	ird	Mee	tin	g			9/	11/	90																													
	9th Meeting	4/19/88		34	th	Mee	tin	9			10,	/30	/90)																												
	10th Meeting	5/10/88		35	th	Hee	tin	9			12	/5/	90																													
	11th Meeting	6/2/88		36	th	Mee	tin	9			1/	16/	91																													
	12th Meeting	6/27/88		37	'th	Hee	tin	g			2/	12/	91																													
	13th Meeting	8/3/88																																								
	14th Meeting	9/8/88																																								
	15th Meeting	10/19/88																																								
	16th Meeting	11/22/88		•	CI	air	man	1																																		
	17th Meeting	12/21/88																																								
	18th Meeting	1/11/89							•																																	
	19th Meeting	1/24/89																																								
	20th Meeting	2/17/89																																								
	21st Meeting	3/23/89																																								
	22nd Meeting	5/22/89																																								
	23rd Meeting	7/5/89																																								
	24th Meeting	9/7/89																																								

Appendix F

Impact of NTSC Taboos on the Availability of ATV Spectrum

5

IMPACT OF NTSC TABOOS ON THE AVAILABILITY OF ATV SPECTRUM

PURPOSE

To assess the impact of keeping and/or relaxing some or all of the existing NTSC taboos on the availability of spectrum for ATV.

To examine a number of different assignment approaches to reduce and/or minimize the impact of taboos on the availability of spectrum for ATV.

TECHNICAL PARAMETERS

NTSC TABOOS

Adjacent (Channels $n \pm 1$) = 87.7 km

IF Beat (Channels $n \pm 7$ and 8) = 32.2 km

Half IF (Channel n + 4) = 32.2 km

Intermodulation (Channels $n \pm 2$, 3, 4 and 5) = 32.2 km

Cross Modulation (Channels $n \pm 2$, ± 4) = 32.2 km

Oscillator Radiation (Channel n + 7)* = 95.7 km

Sound & Picture Image (Channels n + 14, 15) = 95.7, 119.0 km

Co-channel Separation

ATV-to -NTSC and ATV-to-ATV = 160 km (Baseline run)

^{*} Data not included in the presentation

ANALYSIS

ATV/NTSC Scenario

Taboo mileage separation restrictions are applied equally to all ATV and NTSC assignments -- similar to the existing NTSC service.

NTSC Scenario

Taboo mileage separation restrictions are applied to all existing NTSC assignments.

NTSC/Co-located Scenario

Taboo mileage separation restrictions are applied to all NTSC assignments except when the taboo channel is co-located.

ADJACENT & IMAGE TABOOS

Taboo	ATV/NTSC Scenario*	NTSC Scenario*	NTSC/Colocated Scenario*
n + 1	47	20	2
n - 1	47	15	1
n <u>+</u> 1	93	63	30
⁵ n + 14	35	5	3
n + 15	111	30	5
$n \pm 1, + 14, + 15$	338	156	99

^{*} The value denotes the number of HDTV assignments lost relative to co-channel only assignment at 160 km.

INTERMODULATION TABOOS

	Taboo	ATV/NTSC Scenario*	NTSC Scenario*	NTSC/Colocated Scenario*
	n + 2	3	0	0
	n - 2	3	1	0
	n + 3	4	0	0
	n - 3	5	3	0
60	n + 4	4	0	0
	n -4	5	1	0
	n + 5	4	0	0
	n - 5	7	0	0
	n ± 2, 3, 4, 5	70	50	3

^{*} The value denotes the number of HDTV assignments lost relative to co-channel only assignment at 160 km.

IF-RELATED/ CROSS MODULATION TABOOS

Taboo	ATV/NTSC Scenario*	NTSC Scenario*	NTSC/Colocated Scenario*
n + 7	2	0	0
n - 7	1	0	0
n + 8	3	3	1
n - 8	2	0	0
6 n + 4	4	0	0
n + 4, $+ 7$ and 8	33	11	1
Cross Modulation			
n + 2, n + 4	19	1	1
n - 2, n - 4	19	1	0

^{*} The value denotes the number of HDTV assignments lost relative to co-channel only assignment at 160 km.

COMBINED ADJ. IM/XM, IF & IMAGE TABOOS

	Taboo	ATV/NTSC Scenario*	NTSC Scenario*	NTSC/Colocated Scenario*
	n ± 1	93	63	30
	n ± 1, 14, 15	338	156	99*
	n + 2, 3, 4, 5	70	50	3
62	n + 4, ± 7 and 8	19	11	1
10	n ± 2, 3, 4, 5, 7, 8	135	98	21
	n ± 1, 2, 3, 4, 5, 7, 8, + 14,	15 491	304	153 *

^{*} The value denotes the number of HDTV assignments lost relative to co-channel only assignment at 160 km.

- Regardless of which scenario was examined, the adjacent channel taboo was determined to achieve the worst accommodation statistics for ATV, while the IM-related taboos exhibited the best.
- NTSC/Co-located Scenario was determined to achieve the best accommodation statistics.
- Except for the picture image taboo, the effect of increasing or reducing taboo separation distance has little or no impact on the ATV accommodation statistics.
- Allowing exact co-location of the taboo channel slightly/moderately improves the ATV accommodation statistics of ATV. Near co-location of the taboo channel adds little, if any, improvement to the accommodation statistics.